

DISABILITY AND COMMUNICATION ACCESS BOARD

919 Ala Moana Boulevard, Room 101 • Honolulu, Hawaii 96814
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INTERPRETIVE OPINION

Pursuant to §103-50, Hawaii Revised Statutes (HRS), all buildings and facilities constructed by or on behalf of the State or any county, shall conform to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and amendments. In accordance to HRS §103-50 and Chapter 11-217, Hawaii Administrative Rules, the Disability and Communication Access Board has authority to issue interpretive opinions to HRS §103-50 design standards.

Docket: **DCAB 2003-08:** Attached are several handrail design cross sections. Do any of these designs provide an equivalent gripping surface per ADAAG 4.26.2 and 4.26.4?

Summary: The ADAAG Section 4.26.2 states that the diameter or width of the gripping surface of a handrail shall be 1-1/4 inches to 1-1/2 inches, or the shape shall provide an equivalent gripping surface. The ADAAG Section 4.26.4 states that edges shall have a minimum radius of 1/8 inch. Both the U.S. Department of Justice and U.S. Access Board stated that the attached handrail cross sections do not appear to comply with the ADAAG, because the width of all the handrail cross sections are greater than 1-1/2 inches.

The ADAAG, Proposed Rule, dated Tuesday November 16, 1999 allows a larger handrail width and defines equivalent graspability. However, the proposed ADAAG has not been adopted by the U.S. Department of Justice, therefore it is not enforceable. The proposed ADAAG Section 505.7 requires that handrails shall have a circular cross section with an outside diameter of 1-1/4 inches minimum and 2 inches maximum, or shall provide equivalent graspability in accordance with Section 505.7.1. The proposed ADAAG Section 505.7.1 requires that non-circular cross sections shall have a perimeter dimension of 4 inches minimum and 6-1/4 inches maximum, and a cross-section dimension of 2-1/4 inches maximum. Similar to the currently adopted ADAAG, the proposed ADAAG Section 505.8 requires that edges shall have a 1/8-inch minimum radius.

The Committee concluded that the handrail cross sections are not in compliance with the currently enforceable ADAAG, but felt that there are options available to a designer, which could allow the use of decorative handrails. The options discussed by the Committee include:

- Designers could submit a request for site specific alternate design.
- Decorative handrails could be used if deemed necessary to maintain the historic significance of the building or facility.
- Designers could design a guardrail with the decorative handrail cross section as a cap, and mount an ADAAG compliant handrail to the side of the guardrail. This design will have some decorative characteristics, while complying with the ADAAG.
- Decorative handrail cross sections could be used at stairs that are not required to comply with the ADAAG. Per the ADAAG Manual, stairs do not have to comply with the ADAAG where vertical access (i.e., ramp, elevator, or lift) are provided. However, compliance is still a good idea for individuals that may have difficulty walking, who prefer stairs to ramps or a wheelchair lift.

Ruling: For buildings or facilities subject to HRS § 103-50,

ADAAG 4.26.2 and 4.26.4

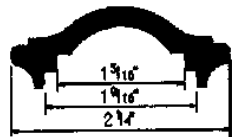
The attached handrail cross sections do not comply with the ADAAG Sections 4.26.2 and 4.26.4.

[Rul: 11/03] (Auth and Imp: HRS §103-50)

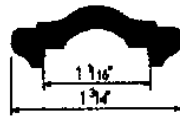
If you have any questions or comments regarding this ruling, please call us at 586-8121.

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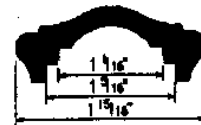
Handrail cross sections:



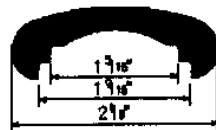
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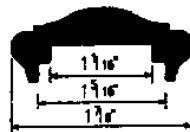
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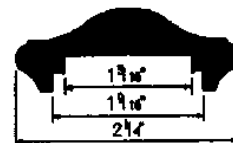
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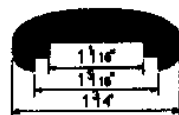
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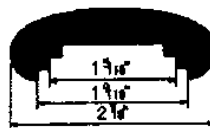
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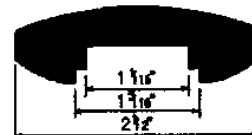
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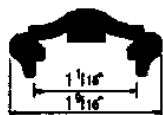
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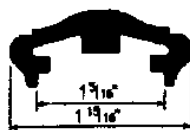
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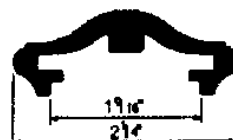
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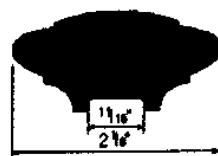
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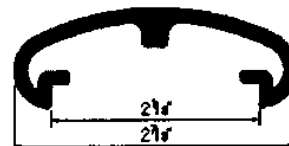
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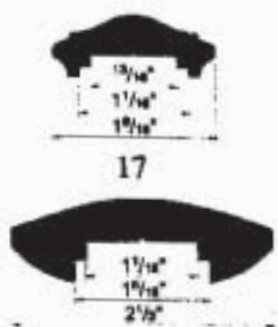


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Handrail cross sections:



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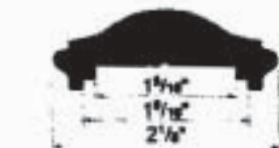


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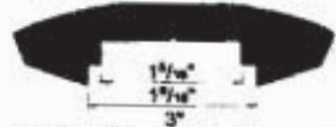


a	b
1-3/4"	1-5/16"
2-1/8"	1-9/16"

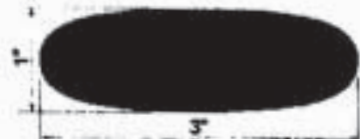
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